### (19) World Intellectual Property Organization

International Bureau



## 

(43) International Publication Date 10 February 2005 (10.02.2005)

**PCT** 

# (10) International Publication Number WO 2005/012539 A1

(51) International Patent Classification<sup>7</sup>: C12N 15/869, A61K 39/00, C12N 5/10, C12P 21/00, C12N 7/00

(21) International Application Number:

PCT/IL2004/000719

(22) International Filing Date: 4 August 2004 (04.08.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/491,978

4 August 2003 (04.08.2003) US

(71) Applicant and

(72) Inventor: FRENKEL, Niza [IL/IL]; 5 Shaul Avigur Street, 69379 Tel-Aviv (IL).

(74) Agent: REINHOLD COHN AND PARTNERS; P.O.Box 4060, 61040 Tel Aviv (IL).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### **Published:**

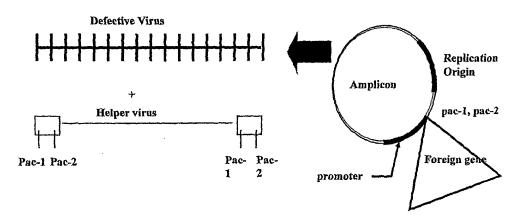
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: VACCINATION VECTORS DERIVED FROM LYMPHOTROPIC HUMAN HERPES VIRUSES 6 AND 7

### AMPLICON-TYPE VECTORS

amplicon-6 Tamplicon-7 (HHV-6) (HHV-7)



(57) Abstract: A vector is presented comprising a DNA sequence derived from HHV-6 or HHV-7, said DNA sequence comprising an origin of replication, a cleavage and packaging signal and a promoter sequence which induces expression of at least one nucleic acid sequence product in a lymphocyte cell host, wherein administration of said DNA vector to a mammal results in an immune response in said mammal. Optionally the vector comprises at least one foreign nucleic acid sequence which elcits the immune response. Also presented are cells comprising the vectors, and concatameric DNA vector produced using such vectors. In addition, methods for the production and use of the above are discribed, including pharmaceutical compositions comprising same.